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PTO/SB/01 (12-97)

Approved for use through 9/30/99. OMB 0651-0032

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|   |  |   |                |
|---|--|---|----------------|
| <b>DECLARATION FOR UTILITY OR<br/>DESIGN<br/>PATENT APPLICATION<br/>(37 CFR 1.63)</b> |  | <b>Attorney Docket Number</b> 02222/PHYS00101<br><b>First Named Inventor</b> Xunming Deng<br><b>COMPLETE IF KNOWN</b> |                |
|   |  | Application Number  | 10 / 205,481   |
|   |  | Filing Date   | July 25, 2002  |
|   |  | Group Art Unit  | 2812           |
|   |  | Examiner Name   | Conf. No. 7656 |

As a below named inventor, I hereby declare that:

My residence, post office address, and citizenship are as stated below next to my name.

I believe I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

## NOVEL HOT-FILAMENT CHEMICAL VAPOR DEPOSITION CHAMBER AND PROCESS WITH MULTIPLE GAS INLETS

*(Title of the Invention)*

the specification of which

is attached hereto  
OR

was filed on (MM/DD/YYYY) 07/25/2002 as United States Application Number or PCT International

Application Number 10/205,481 and was amended on (MM/DD/YYYY) (if applicable).

I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56.

I hereby claim foreign priority benefits under 35 U.S.C. 119(a)-(3) or 365(b) of any foreign application(s) for patent or inventor's certificate, or 365(a) of any PCT international application which designated at least one country other than the United States of America, listed below and have also identified below, by checking the box, any foreign application for patent or inventor's certificate, or of any PCT international application having a filing date before that of the application on which priority is claimed.

| Prior Foreign Application Number(s) | Country | Foreign Filing Date (MM/DD/YYYY) | Priority Not Claimed   | Certified Copy Attached? YES   | Certified Copy Attached? NO  |
|-------------------------------------|---------|----------------------------------|--|--|--|
|                                     |         |                                  | <input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/> | <input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/> |

Additional foreign application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto.

I hereby claim the benefit under 35 U.S.C. 119(e) of any United States provisional application(s) listed below.

| Application Number(s) | Filing Date (MM/DD/YYYY) | <input type="checkbox"/> Additional provisional application numbers are listed on a supplemental priority data sheet PTO/SB/02B attached hereto. |
|-----------------------|--------------------------|--|
| 60/308,014            | 07/26/2001               | <input type="checkbox"/>   |

(Page 1 of 2)

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## DECLARATION – Utility or Design Patent Application

I hereby claim the benefit under 35 U.S.C. 120 of any United States application(s), or 365(c) of any PCT international application designating the United States of America, listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States or PCT international application in the manner provided by the first paragraph of 35 U.S.C. 112, I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.

| U.S. Parent Application or PCT Parent Number | Parent Filing Date (MM/DD/YYYY) | Parent Patent Number (If applicable) |
|--|---------------------------------|--------------------------------------|
|  |                                 |                                      |

Additional U.S. or PCT international application numbers are listed on a supplemental priority date sheet PTO/SB/02B attached hereto.

As a named inventor, I hereby appoint the following registered practitioner(s) to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:  Customer Number 20879 ←  
OR  
 Registered practitioner(s) name/registration number listed below

Place Customer Number  
Bar Code Label here

| Name                   | Registration Number | Name                   | Registration Number |
|------------------------|---------------------|------------------------|---------------------|
| Richard D. Emch        | 22,302              | Catherine B. Martineau | 31,854              |
| Charles R. Schaub      | 27,518              | Gregg W. Emch          | 38,868              |
| James F. Porcello, Jr. | 29,425              | Philip M. Rice         | 20,855              |
| Patrick P. Pacella     | 25,463              |                        |                     |

Additional registered practitioner(s) named on supplemental Registered Practitioner Information sheet PTO/SB/02C attached hereto.

Direct all correspondence to:  Customer Number 20879 OR  Correspondence address below  
or Bar Code Label

|         |   |           |                |     |                |
|---------|---|-----------|----------------|-----|----------------|
| Name    | Catherine B. Martineau                        |           |                |     |                |
| Address | Emch, Schaffer, Schaub & Porcello Co., L.P.A. |           |                |     |                |
| Address | P.O. Box 916                                  |           |                |     |                |
| City    | Toledo  | State     | OH             | ZIP | 43697-0916     |
| Country | US  | Telephone | (419) 243-1294 | Fax | (419) 243-8502 |

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under 18 U.S.C. 1001 and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Name of Sole or First Inventor:

A petition has been filed for this unsigned inventor

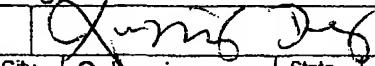
Given Name (first and middle if any)

Family Name or Surname

Xunming

Deng

Inventor's Signature



Date

Oct 7, 2002

Residence: City Sylvania State Ohio Country US Citizenship US

Post Office Address 7749 Sandia Court

Post Office Address

City Sylvania State Ohio ZIP 43560 Country US

Additional inventors are being named on the 1 supplemental Additional Inventor(s) sheet(s) PTO/SB/02A attached hereto.

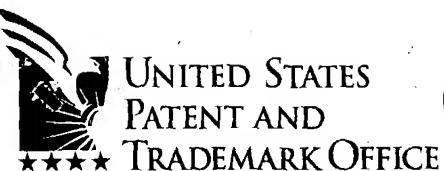
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## DECLARATION

ADDITIONAL INVENTOR(S)  
Supplemental Sheet  
Page 1 of 1

|  |                         |   |               |
|--|-------------------------|---|---------------|
| Name of Additional Joint Inventor, if any: |                         | <input type="checkbox"/> A petition has been filed for this unsigned inventor |               |
| Henry S.<br>Given Name                     |                         | Povolny<br>Family Name or Surname   |               |
| Inventor's Signature                       | <i>Henry S. Povolny</i> |   | Date 10/7/02  |
| Elmore                                     | Ohio                    | US  | US            |
| Residence: City                            | State                   | Country   | Citizenship   |
| 18731 State Route 105                      |                         |   |               |
| Mailing Address                            |                         |   |               |
| Mailing Address                            |                         |   |               |
| Elmore<br>City                             | Ohio<br>State           | 43416<br>ZIP  | US<br>Country |
| Name of Additional Joint Inventor, if any: |                         | <input type="checkbox"/> A petition has been filed for this unsigned inventor |               |
| Given Name                                 |                         | Family Name or Surname  |               |
| Inventor's Signature                       |                         |   | Date          |
| Residence: City                            | State                   | Country   | Citizenship   |
| Mailing Address                            |                         |   |               |
| Mailing Address                            |                         |   |               |
| City                                       | State                   | ZIP   | Country       |
| Name of Additional Joint Inventor, if any: |                         | <input type="checkbox"/> A petition has been filed for this unsigned inventor |               |
| Given Name                                 |                         | Family Name or Surname  |               |
| Inventor's Signature                       |                         |   | Date          |
| Residence: City                            | State                   | Country   | Citizenship   |
| Mailing Address                            |                         |   |               |
| Mailing Address                            |                         |   |               |
| City                                       | State                   | ZIP   | Country       |

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FEBRUARY 03, 2003

PTAS

CATHERINE B. MARTINEAU  
P.O. BOX 916  
TOLEDO, OH 43697-0916

Under Secretary of Commerce For Intellectual Property and  
Director of the United States Patent and Trademark Office  
Washington, DC 20231  
[www.uspto.gov](http://www.uspto.gov)



\*102257793A\*

UNITED STATES PATENT AND TRADEMARK OFFICE  
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

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PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 10/21/2002

REEL/FRAME: 013399/0918  
NUMBER OF PAGES: 3

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:  
DENG, XUNMING

DOC DATE: 10/07/2002

ASSIGNOR:  
POVOLNY, HENRY S.

DOC DATE: 10/07/2002

ASSIGNEE:  
THE UNIVERSITY OF TOLEDO  
2801 W. BANCROFT  
TOLEDO, OHIO 43606

SERIAL NUMBER: 10205481  
PATENT NUMBER:

FILING DATE: 07/25/2002  
ISSUE DATE:

LAZENA MARTIN, EXAMINER  
ASSIGNMENT DIVISION  
OFFICE OF PUBLIC RECORDS

10-23-2002

Form PTO-1595  
(Rev. 03/01)

OMB No. 0651-0027 (exp. 5/31/2002)

Tab settings   U.S. DEPARTMENT OF COMMERCE  
U.S. Patent and Trademark Office

102257793

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

## 1. Name of conveying party(ies):

Xunming Deng  
Henry S. Povolny

10-21-02

## 2. Name and address of receiving party(ies)

Name: The University of Toledo

Internal Address: \_\_\_\_\_

Additional name(s) of conveying party(ies) attached?  Yes  No

## 3. Nature of conveyance:

 Assignment Merger Security Agreement Change of Name Other \_\_\_\_\_

Execution Date: 10/7/2002

Street Address: 2801 W. Bancroft

City: Toledo State: OH Zip: 43606

Additional name(s) & address(es) attached?  Yes  No

## 4. Application number(s) or patent number(s):

If this document is being filed together with a new application, the execution date of the application is: \_\_\_\_\_

A. Patent Application No.(s) 10/205,481

B. Patent No.(s) \_\_\_\_\_

Additional numbers attached?  Yes  No

## 5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Catherine B. Martineau

Internal Address: \_\_\_\_\_

Street Address: P.O. Box 916

City: Toledo State: OH Zip: 43697-0916

6. Total number of applications and patents involved: 1

7. Total fee (37 CFR 3.41).....\$ 40.00

 Enclosed Authorized to be charged to deposit account

## 8. Deposit account number:

15-0825

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## 9. Signature.

Catherine B. Martineau

Name of Person Signing

Catherine B. Martineau  
Signature

15 October 2002

Date

Total number of pages including cover sheet, attachments, and documents: 3

Mail documents to be recorded with required cover sheet information to:  
Commissioner of Patents & Trademarks, Box Assignments  
Washington, D.C. 20231

10/23/2002 DBYRNE 00000013 10205481

01 FC:8021

40.00 OP

**ASSIGNMENT**

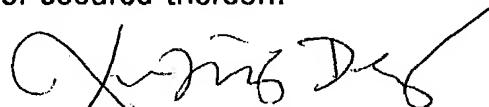
WHEREAS, we, XUNMING DENG of 7749 Sandia Court, Sylvania, Ohio 43560, and HENRY S. POVOLNY of 18731 State Route 105, Elmore, Ohio 43416, have invented a NOVEL HOT-FILAMENT CHEMICAL VAPOR DEPOSITION CHAMBER AND PROCESS WITH MULTIPLE GAS INLETS for which we have executed application for United States Letters Patent Serial No. 10/205,481 filed July 25, 2002; and

WHEREAS, THE UNIVERSITY OF TOLEDO, of 2801 W. Bancroft, Toledo, Ohio 43606, organized and operating in the State of Ohio, is desirous of acquiring the entire interest in and to said invention and any Letters Patent to issue therefor;

NOW THEREFORE, to all whom it may concern, be it known that for and in consideration of the sum of One Dollar (\$1.00) and other valuable considerations to us in hand paid, the receipt whereof is hereby acknowledged, we, XUNMING DENG and HENRY S. POVOLNY, do hereby sell, assign and transfer unto the said, THE UNIVERSITY OF TOLEDO, its successors or assigns, the entire right, title and interest in and to said application and invention in the United States and all countries foreign thereto, including the right of priority under the International Convention of 1883 and later modifications thereof, and to any Letters Patent to issue therefor, and we hereby request the Commissioner of Patents and Trademarks of the United States to issue to said company any Letters Patent thereon, in accordance with the terms of this assignment.

We agree to execute any and all documents required by said company, its successors or assigns, for the prosecution of said application, or of any division,

continuation, reissue, or reexamination thereof, or for securing foreign patents covering said invention, and also any documents required by it, its successors or assigns, to more fully vest in it or them title to said invention, or to any application or patent that may be filed therefor or secured thereon.



XUNMING DENG



HENRY S. POVOLNY

STATE OF OHIO )  
 ) SS  
COUNTY OF LUCAS )

On this 7th day of October, 2002, before me appeared XUNMING DENG, to me personally known, and acknowledged the signing of the above instrument to be his free act and deed.

(SEAL)



Notary Public

CHRISTIAN R. DRAGO, ESQ.  
Notary Public – State of Ohio  
Commission has no expiration.  
Section 147.03 ORC

STATE OF OHIO )  
 ) SS  
COUNTY OF LUCAS )

On this 7th day of October, 2002, before me appeared HENRY S. POVOLNY, to me personally known, and acknowledged the signing of the above instrument to be his free act and deed.

(SEAL)



Notary Public

CHRISTIAN R. DRAGO, ESQ.  
Notary Public – State of Ohio  
Commission has no expiration.  
Section 147.03 ORC